

Determine the actual amount of hepatitis C in blood donors with positive HCVAb

Abstract:

Background: nowadays, 0.3% of the world populations (170 million people) are infected with hepatitis C approximately. The prevalence of hepatitis C is different in blood donors in the different parts of world. Given to the increasing trend of HCV, known side effects and having no information on the status of the disease, we decided to found actual amount of this disease in blood donors in this province that HCVAb has been confirmed with ELISA method in them.

Materials and Methods: This study is a descriptive cross sectional. In this study, patients who had referred to Blood Transfer Organization and proven hepatitis C by ELISA and RIBA were, Blood samples were taken and referred to genetic laboratory of Imam Khomeyni for PCR test. A pre-designed check list were completed that was included individual characteristics (age, sex, place of residence, occupation, marital status) and risk factors for hepatitis C (blood transfusion, head daggering, dialysis, imprisonment, dental history, pulling teeth, tattoos, etc.) obtained data with experimental results were analyzed by SPSS v16 statistical software.

Results: In this study, 73.68% of the patients were male and the rest were female. The age average was 40.68 ± 15.17 years and the most common age range was from 40 to 45 years. Evaluation of risk factors showed that 16 patients (84.21%) had at least one risk factor. In this study, patients had no history of risky sexual behavior, abroad traveling and tattoos. 23.52% of patients had blood transfusion history, 5.88% of patients had parents with hepatitis C, 23.52% with past drug injection, 5.18 % with incarceration background, 64.70% with dentistry, 35.29% with hospitalization, 11.76% head daggering and 5.88% with dialysis history. In this study, the ELISA test was positive in 60 cases of blood donors and the RIBA supplemental test was positive in 19 cases of them only. In the other word, 31.66% of patients with positive ELISA had positive RIBA to. After PCR performing, were observed that PCR was positive in 12 patients (63.15 %), and a negative test were reported in the others.

Conclusion: The results indicated that the ELISA test hasn't high sensitivity in studied patients and RIBA test cannot detect Hepatitis C disease absolutely.

Keywords: Hepatitis C , PCR, Transfusion